

METHOD FOR CONDUCTING
A FINANCIAL ANALYSIS

Technical Field

5 The present invention relates to methods for
analyzing financial data in a large business
enterprises.

Background Art

Large business enterprises employ thousands of
people, many of whom are involved in conducting
10 financial analysis for the business enterprise. Some of
these employees may be full-time financial analysts, and
others may need to conduct financial analysis only
occasionally. However, it is critical that any
financial analysis conducted within a business
15 enterprise is predicated on the same set of data,
assumptions, and rules. This ensures that financial
information may be shared between employees, skills are
transferred, and best practices are employed.

Prior art methods for conducting financial
20 analysis within large business enterprises have not
utilized uniform business processes for conducting
financial analysis. What is most prevalent in large
business enterprises are multiple and varied methods for
conducting financial analysis. Typically, the multiple
25 methods use a plurality of data sources, varied
assumptions, and differing rules. The result is that
employees in one area of a business enterprise are not
able to communicate the financial analysis in a
compatible and understandable manner with other
30 financial analysts in other parts of the company.

Therefore, there is a need for a new and improved system and method for conducting financial analysis within a large business enterprise. The new and improved system and method for conducting financial analysis must provide a common process for conducting financial analysis wherein the process is accessible by all the employees within the business enterprise.

Disclosure Of Invention

In accordance with an aspect of the present invention a method is provided for conducting a financial analysis. The method includes creating a financial analysis utility having a standardized format, and providing access through a communication network to the financial analysis utility to employees of a business enterprise. Thus, the present invention provides a single source for the financial analysis utility.

In accordance with another aspect of the present invention, the method further includes creating a rules table for use with the financial analysis utility.

In accordance with still another aspect of the present invention, the rules table matches a user input with a predefined rule to obtain a rate.

In accordance with still another aspect of the present invention, the financial analysis utility is in communication with a database having actual and forecasted financial values.

In accordance with still another aspect of the present invention, the financial analysis utility is an exchange rate tool.

Brief Description Of Drawings

Figure 1 is a block diagram of a system and method for calculating vehicle projections, in accordance with the present invention;

5 Figure 2 is a block diagram illustrating the interaction of a projection engine with a toolbox, in accordance with the present invention;

 Figure 3 is a flowchart illustrating a process for using a volume extension tool, in accordance with
10 the present invention;

 Figure 4 is a flowchart illustrating a process for using an aggregation/average tool, in accordance with the present invention;

 Figure 5 is a flowchart illustrating a process
15 for using an allocation tool, in accordance with the present invention;

 Figure 6 is a flowchart illustrating a process for using a variance tool, in accordance with the present invention; and

20 Figure 7 is a flowchart illustrating a process for using an exchange rate tool, in accordance with the present invention.

Best Mode For Carrying Out The Invention

Reference is now made to Figure 1 which is a
25 diagrammatic representation of a financial analysis utility 10 for calculating vehicle financial projections. Utility 10 receives operating costs 12 and balance sheet information 14 as system inputs to create vehicle specific financials 16. Vehicle specific
30 financials are received by common tools 17, projection

and decision models 18 which generate vehicle financial
projections 20. The vehicle financial projections 20
and the vehicle specific financials 16 are transformed
into multiple views 22. The vehicle financial
5 projections 20 and the vehicle specific financials 16
are presented in different views for use in decision
processes 26.

The balance sheet information 14, typically,
contains net operating assets and other asset
10 information. Additionally, balance sheet 14 has cash
contribution and full cash flow information as well.
Operating costs 12 (period expense) includes labor and
overhead, engineering, administrative and selling costs.
Preferably, vehicle actuals and vehicle financial
15 projections include net revenue, material cost, outbound
freight, warranty, etc. Generally, projections include
period expense projections, balance sheet projections,
and input from vehicle projections. Common tools 17
20 include allocation of actual and forecast period
expense, exchange rate conversion, variance analysis,
average vehicle calculations, and volume extension.

Referring now to Figure 2, a block diagram
illustrating the interaction of a projection engine 30
with a toolbox 32 is illustrated, in accordance with the
25 present invention. Preferably, a user 33 actuates
projection engine 30 to work with actuals, forecast
assumptions, and physical assumptions. Projection
engine 30 calls toolbox 32 to provide user 33 with the
vehicle projections. Toolbox 32 includes multiple
30 common tools 17 for calculating vehicle projections.
Preferably, toolbox 32 includes a volume extension
tool 34, aggregation/average tool 36, an allocation
tool 38, an exchange rate tool 40 and a variance tool 42

however, other tools may be added. Toolbox 32 has a standardized format which includes a set of rules 44 and the set of common tools 17.

5 The set of rules 44 dictate how each tool is used with the inputs to the projection engine 30. Preferably, the set of rules exists in a look-up table configuration wherein, inputs received from the projection engine are matched with an appropriate predefined rule or "rate". The "rate" is then used with
10 the inputs to perform the desired calculations.

Further, a plurality of databases are connected to the toolbox 32 for providing data to each of the common tools 17 to carry out the respective calculations requested by the projection engine 30. For
15 example, the aggregation/average tool 36 is connected to the vehicle design database (VDD) 46, and the exchange rate tool 40 receives exchange rate information from the accounting system database (ASD) 48 and the plant production actuals database (PPAD) 50 to accomplish the
20 desired exchange rate calculations. Other databases are accessible by the toolbox 32 such as a volumes database (VD) 52 which provides volume information to the toolbox and a product definition database (PDD) 53 which provides product definition information to the toolbox.
25 The results generated by the toolbox 32 may be deposited in one or two database storage facilities such as the projection engine forecast database (PEFD) 54 and data warehouse database (DWD) 56.

Referring now to Figure 3, a process for
30 determining a volume extension using projection engine 30 and toolbox 32 is illustrated, in accordance with the present invention. The process starts with the projection engine 30 requesting a volume extension from

toolbox 32, as represented by block 60. The volume extension tool 34 receives the per unit line item financials along with the requested volume type from the projection engine, as represented by block 62. At block 64, the volume extension tool obtains the appropriate set of volumes from the VD database 52. The volume extension tool then extends the line item per unit by the required volume set, as represented by block 66. At block 68, the volume extension tool returns the extended unit mils to the projection engine 30. Finally, projection engine 30 stores the result in databases 54 and 56 and may also display the results to user 33, as represented by block 70.

Referring now to Figure 4, a process for determining an aggregate or average is illustrated, in accordance to the present invention. The process starts at block 80 wherein the projection engine 30 initiates a request for an aggregated or average view. The aggregated or average tool 36 receives the line item financials from the projection engine, as represented by block 82. At block 84, the aggregate/average tool 36 uses a flexible organizational structure to determine the summation. As indicated by block 85, if an average vehicle view is sought, then at block 86 the average tool queries the volumes from the VD database and divides aggregated financials to get the per unit amount. The average tool returns the average financials to the projection engine, at block 87. However, if an aggregation view is sought, the aggregation tool returns aggregated financials, at block 88. Finally, at block 90, the projection engine stores the results in database 54 and 56 and may present the results to the user 33.

Referring now to Figure 5, a process for allocating an amount is illustrated, in accordance with the present invention. The process is initiated at block 92 where period costs and revenue amounts are sent from source systems to the projection engine 30. At block 94, the projection engine stores naturally occurring amounts and calls the allocation tool 38. The allocation tool looks up the allocation rules and basis amount for configured vehicle, as represented at block 96. At block 98, the allocation of period cost to the configured vehicle by market and source is executed. At block 100, allocation tool 38 returns the allocated amounts by configured vehicle view with input source to the projection engine 30. Finally, at block 102, projection engine stores the allocated line items for future reports and requests.

Referring now to Figure 6, a variance tool process is illustrated, in accordance with the present invention. The process is initiated at block 110 where the variance tool 42 receives the following input parameters from projection engine 30: view type, time periods, line items, and issue number. At block 112, the variance tool retrieves causal factor rules from the projection engine data model. The variance tool 42 obtains volumes and product definition differences from the VD and the PDD databases 52 and 53. At block 116, data is retrieved from the projection engine data store database 54. The variance tool, at block 118 calls the volume extension tool aggregation/averaging tool, and exchange rate tool to perform required calculations. At block 120, VIN\product-specific variance, period variance, and total variance for requested line item is calculated. VIN\product-specific variance and period

variance by causal factors is explained, at block 122. At block 124, vehicle specific causal factors are calculated in the following order: volume, mix, net revenue change, cost change, and exchange. At

5 block 126, period item causal factors are calculated in the following order: one-time, net revenue change, cost change, and exchange. Finally, at block 128, the output is returned to the projection engine for presentation and storage.

10 Referring now to Figure 7, a process for converting an amount from one currency to another currency is illustrated, in accordance with the present invention. The process is initiated at block 150 where the projection engine 30 sends current currency
15 information including currency type, amount and desired target currency type to the exchange tool 40. At block 152, the exchange tool 40 locates the appropriate currency exchange rate in the ASD and PPAD databases. A new currency is calculated using the appropriate
20 currency exchange rate, as represented at block 154. At block 156, exchange tool 40 returns the new currency information including currency type and amount to the projection engine 30. Finally, at block 158, projection engine 30 stores the new currency information for future
25 reports and requests and/or returns result to user 33.

While the best mode for carrying out the invention has been described in detail, those familiar with the art to which this invention relates will recognize various alternative designs and embodiments
30 for practicing the invention as defined by the following claims.